Social Science Research Commons & Karl F. Schuessler Institute for Social Research

Workshop in Methods

Nonparametric Statistics for Social Scientists

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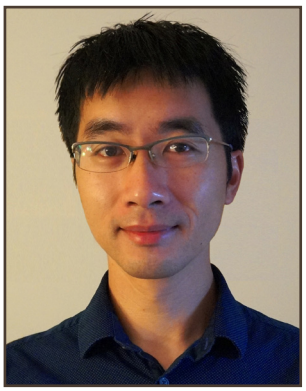

Parametric statistical methods may perform poorly when their assumptions are violated. For example, the t-test may have low power when samples are not from normal distributions, while linear regression will predict poorly when the relationships between variables is not linear. "Nonparametric statistics" refers to a broad range of techniques that avoid restrictive parametric assumptions about populations or data. We will explore two very different nonparametric methods: Rank tests, where hypotheses are tested by comparing the ranks of samples, and smoothing splines, which fit smooth curves and surfaces to data that may not be linear. We will implement these techniques in R, and discuss when it may or may not be appropriate to use these techniques instead of their parametric counterparts.

Friday, April 10, 2015, 2-4pm

Social Science Research Commons Grand Hall
Woodburn Hall 200